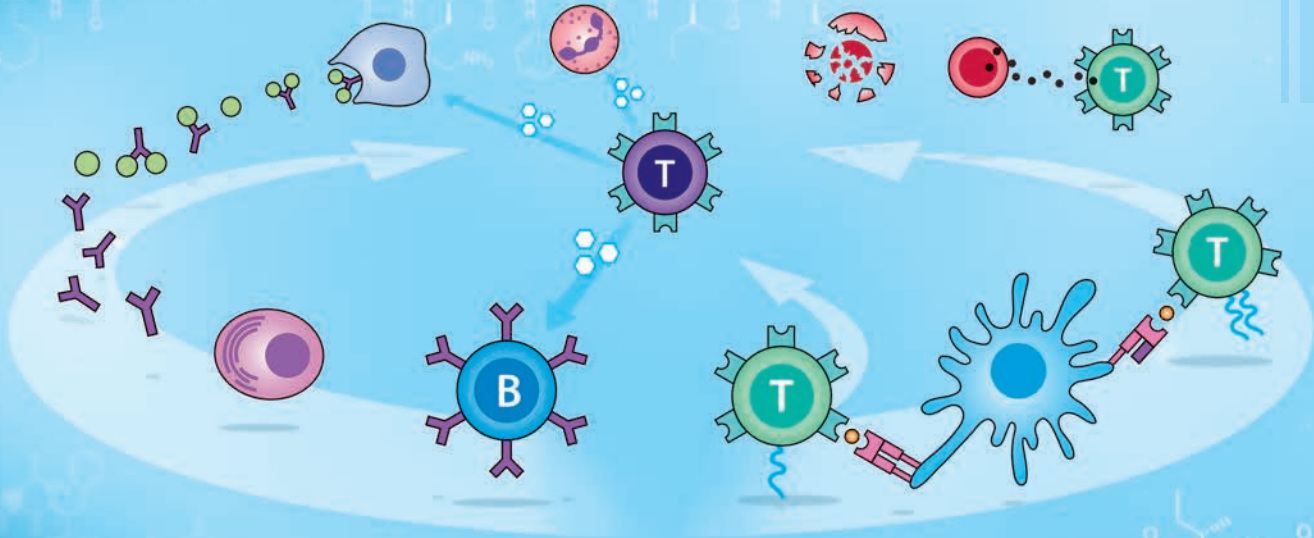


Innovative Peptide Solutions



Immunotherapy Resources

Peptides – The Superior Antigens for

- ❖ Individualized Therapies
- ❖ Neo-Epitope Prioritization
- ❖ Clinical Immune Monitoring
- ❖ Adoptive Cell Transfer
- ❖ Deep Target Discovery
- ❖ Dendritic Cell-Based Therapies

Contact us for further information: peptide@jpt.com

JPT Peptide Technologies
www.jpt.com
peptide@jpt.com

Contact
T +49-30-6392-7878
F +49-30-6392-7888

USA/Canada
T 1-888-578-2660
F 1-888-578-2666

jpt

Innovative Peptide Solutions

Peptides for Immunotherapy...

Peptide Issues To Consider!

- Can your peptides be chemically synthesized?
- How do you control stability and shelf life?
- How can cross-contamination with unwanted peptides be avoided?
- How to avoid undesired stimulation by de-novo epitopes?
- Can you predict and assess solubility?
- How to avoid toxic by-products?
- How to select the best peptide quality and sequence length?

Ask The Peptide Experts!

- Two decades worth of experience in peptide chemistry
- RUO, ISO PLUS and Clinical Grade quality levels tailored to your needs
- Synthesis protocols to avoid formation of de-novo epitopes
- Line clearance workflows to avoid cross contamination
- Assessment of synthetic accessibility, stability and solubility
- Full chemical and biological analysis capabilities
- Educated scientific and regulatory support
- Facility controlled by ADCF policy
- Quality management system and annual quality audits

Bioinformatics At Your Disposal!

- Algorithms to predict synthetic accessibility, stability and solubility
- Peptide library and pool design for optimal sequence diversity coverage
- In silico peptide prioritization for binding and bioactivity
- Analysis and presentation of complex data sets
- Generation and application of homology models for peptide selection
- Peptide optimization for binding and physicochemical properties
- In-silico support for immunogenicity ranking of neo-epitopes

... We Know How!

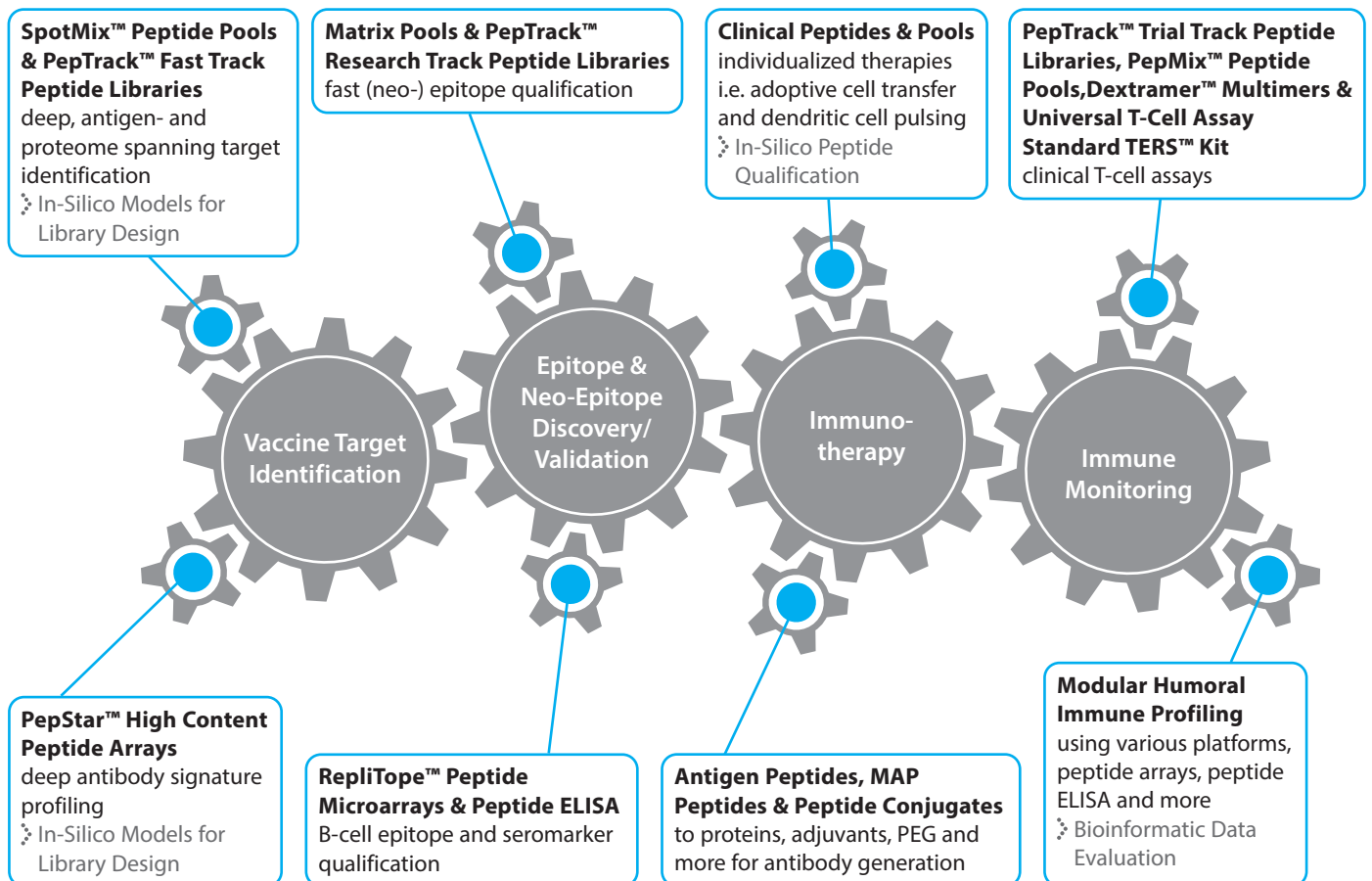
Why Peptides as Antigens?

- Neo-epitopes enable personalized therapies
- Peptides ensure robust epitope resolved immune monitoring
- Only peptides allow the study of B- and T-cell epitope spreading
- Peptides can be synthesized in high purities
- Peptides allow proteome-wide target identification
- No expression needed, ADCF policy applicable
- Sequence diversity and post-translational modifications can be addressed

Why Work with JPT?

- We are the quality leader for peptides in immunotherapy
- We develop unique technologies for discovery, therapy and immune monitoring
- We understand your application
- We have a long track record of successful projects and collaborations
- Over 1000 peer reviewed papers with our products
- We are ISO 9001:2015 certified

Cellular Immunity



Humoral Immunity

Immunotherapy Resources

Selected References

- *"Generation of Dendritic Cell-based Vaccine Using High Hydrostatic Pressure for Non-small Cell Lung Cancer Immunotherapy"*
Hradilova et al., Plos One (2017)
- *"A Phase I Study of Recombinant (r) Vaccinia-CEA (6D)-TRICOM and rFowlpox-CEA (6D)-TRICOM Vaccines with GM-CSF and IFN- α -2b in Patients with CEA-expressing carcinomas"*
Duggan et al., Cancer Immunol Immunother (2016)
- *"Human Parainfluenza Virus-3 can be Targeted by Rapidly Ex Vivo Expanded T Lymphocytes"*
McLaughlin et al., Cytotherapy (2016)
- *"Broadly-specific Cytotoxic T Cells Targeting Multiple HIV Antigens Are Expanded From HIV+ Patients: Implications for Immunotherapy"*
Lam et al., Molecular Therapy (2015)
- *"Role of Naive-derived T Memory Stem Cells in T Cell Reconstitution Following Allogeneic Transplantation"*
Roberto et al., Blood (2015)

Find more at:
www.jpt.com/literature/

Application Notes

- *"Developing Multi-HIV Antigen Specific T Cells as a Component of a Cure Strategy"*
S. Lam, C. R. Cruz and C. Bollard
- *"PepMix™ Peptide Pools for Clinical Applications: T-Cell Therapy for Viral Infections after Hematopoietic Stem Cell Transplant"*
J.M. Keirnan, C.M. Rooney, and A.M. Leen
- *"Peptide-Stimulated Expansion of Virus-Specific T-Cells for Preventative Treatment after Allogeneic Stem Cell Transplantation"*
R. Gary, M. Aigner, A. Moosmann and A. Gerbitz
- *"Qualification and Use of Peptide Libraries for Clinical Trial Immunomonitoring"*
J. H. Cox and P. Hayes
- *"Characterization of the Aspergillus-Specific T-Cell Response by Using Crf1 and Catalase1 Overlapping Peptides"*
H. Jolink and M.H.M. Heemskerck

Full text at:
www.jpt.com/application-notes/

“My group is developing therapeutic strategies for using *in vitro* expanded virus-specific T cells [...] manufactured using JPT's Clinical Grade PepMix™ peptide pools [...]. When administered to 11 allogeneic stem cell transplant recipients, 8 of whom had up to four active infections, these VSTs produced an overall 94% response rate.”

Ann Leen, Baylor College of Medicine, Houston, TX, USA

“[...] Our experience with JPT has been outstanding in regard to product quality and communication with scientific and administrative customer service. JPT is the only company we trust to synthesize the 15-mer peptides and corresponding pools for our clinical trial evaluations.”

Benedetto Farsaci, National Cancer Institute, NIH, Bethesda, MD, USA

Issue Date: October 2020

JPT Peptide Technologies
www.jpt.com
peptide@jpt.com

Contact
T +49-30-6392-7878
F +49-30-6392-7888

USA/Canada
T 1-888-578-2660
F 1-888-578-2666



Innovative Peptide Solutions